In short, only individual carriers can negotiate settlement rates in a way that accurately takes all relevant costs into account. The benchmark proposal not only creates unnecessary difficulties due to its extraterritorial reach, but the benchmarks themselves appear to be based on inaccurate information. In the end, requiring U.S. carriers to negotiate settlement rates based on such erroneous information will have no relevance to foreign carriers' market structures, potentially will distort competition, and thus will do nothing to further the Commission's procompetitive goals.

IV. THE COMMISSION SHOULD NOT TIE FOREIGN AFFILIATES' ENTRY INTO THE U.S. TO COMPLIANCE WITH THE PROPOSED BENCHMARKS.

As the <u>Flexibility Order</u> implies, and as the Commission observed in the Notice, "[e]ffective competition on both ends of an international call would ultimately drive international termination charges closer to costs and erode the subsidy embedded in current settlement rates." The Commission's proposal to enforce its benchmarks by tying foreign affiliates' entry into the U.S. market to compliance with the benchmarks will have exactly the opposite effect. ⁴⁸ Particularly where foreign governments have begun to open their markets to competition, closing U.S. markets to foreign-affiliated entrants will impede, rather than promote, U.S. and global competition. ⁴⁹

^{47 &}lt;u>Id.</u> at ¶ 20.

See id. at ¶ 76 (proposing to condition a foreign affiliate's authorization to provide international facilities-based service in the U.S. on the foreign carrier's adherence to the benchmarks); see also id. at ¶¶ 81-82 (proposing to grant carriers' applications for authority to resell international private lines to provide switched service to the U.S. on the condition that accounting routes on the routes at issue comply with the benchmarks).

See INDETEC Statement at 2, 4-6.

The real solution to high settlement rates is not to close the U.S. market as the Commission proposes here, but to allow foreign carriers and their affiliates access to the U.S. market and to encourage foreign governments to allow U.S. carriers to compete abroad as well. Telmex thus intends to file an application shortly for authorization pursuant to Section 214 of the Communications Act to provide international long distance services in the U.S. market, including service to Mexico. Competition exists in Mexico today; indeed, U.S.-affiliated carriers are Telmex's principal competitors in serving the Mexican market. If the Commission is serious about encouraging U.S. and global competition and reducing settlement rates, it should promptly grant Telmex's forthcoming application and allow market forces on both sides of the border to drive down settlement rates.

In proposing to tie U.S. entry to a foreign carrier's adherence to the benchmarks, the Commission's proposal not only is inconsistent with the Flexibility Order, but it completely overlooks the Commission's contrary conclusions only 15 months ago in the Foreign Carrier Entry Order and in subsequent decisions. In the Foreign Carrier Entry Order, the Commission expressly rejected commenters' arguments that it should tie U.S. entry to cost-based accounting rates, concluding that such an approach would be anticompetitive. Explaining that "[t]he needs of international telecommunications users ultimately are best served by allowing facilities-based competition to flourish on both ends on an international route," the Commission further stated that:

We agree, however, with those commenters arguing that requiring cost-based accounting rates as a precondition of entry could preclude otherwise qualified candidates from competing in the

Foreign Carrier Entry Order, 11 FCC Rcd at 3897; see also id. at 3898-99, 3931, 3933.

U.S. international services market. It would become, in effect, a barrier to market entry. Such a result would be contrary to our objective of encouraging competitive entry and, thereby reducing industry concentration on both ends of U.S. international routes. Additional competition should produce service alternatives and price competition in the U.S. market which should in turn stimulate U.S. outbound demand. This, in turn, will make foreign carriers more amenable to further reducing their accounting rates, in that they will experience less of a loss in settlement revenues. This reduces the per minute settlements burden on U.S. consumers. 51

In fact, twelve days after the release of the Notice, the Commission again reached the same conclusion in granting a New Zealand carrier authority to provide international services between the U.S. and New Zealand. Rejecting a U.S. carrier's suggestion that competition on the U.S.-New Zealand route would not benefit from allowing the foreign carrier entry to the U.S. market since the foreign carrier did not have cost-based accounting rates, the Commission reasoned that "additional competition on this route will result in lower prices and enhanced service options for U.S. consumers." The Commission went on to reaffirm its view that "[i]ncreased U.S.-outbound traffic should make foreign carriers more amenable to further reducing accounting rates in that they will experience less of a loss in net settlement revenues, thus reducing the per-minute settlement burden on U.S. consumers." 53

Id. at 3898; see also id. at 3899 ("[W]e do not believe AT&T has presented a persuasive argument that above-cost accounting rates on particular routes where a carrier has an affiliate on the foreign end realistically jeopardize the ability of unaffiliated carriers to compete on those routes or in the U.S. international services market as a whole. Additionally, we believe the possibility of such harm is outweighed by the benefits of additional price and service competition that will result from further U.S. market entry.").

Telecom New Zealand Limited, DA 96-2182, FCC File No. 1-T-C-96-097, at ¶ 39 (released Dec. 31, 1996).

⁵³ <u>Id.</u>

These recent Commission decisions clearly are based on sound policy and economic grounds.⁵⁴ By definition, encouraging unfettered, symmetric competition both in the U.S. and abroad will promote new service offerings, increased investment, and lower prices for consumers on both ends of an international circuit. This process in turn will create an environment in which natural pressures will force carriers to negotiate lower settlement rates through voluntary bilateral negotiations, and as the <u>Flexibility Order</u> contemplates, ultimately will lead to alternative payment mechanisms that will differ from the traditional accounting rate structure.

Thus, rather than change a policy that is grounded in sound economic principles and unambiguous Commission precedent, the Commission should adhere to its prior determination not to condition a foreign-affiliated carrier's U.S. entry on its affiliate's compliance with benchmark settlement rates.

See INDETEC Statement at 1, 4-6.

CONCLUSION

For the foregoing reasons, the Commission should apply a policy similar to the approach outlined in the <u>Flexibility Order</u> to encourage U.S. carriers to negotiate settlement rate agreements that take foreign countries' and carriers' individualized circumstances into account, particularly where those countries have opened their telecommunications markets to competition and carriers have demonstrated a willingness to reduce settlement rates as they transition to competitive environments. The Commission should not adopt the benchmark proposal.

Respectfully submitted,

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STATEMENT OF INDETEC INTERNATIONAL

Statement Evaluating the FCC's Methodology for Setting International Settlement Rate Benchmarks

FCC IB Docket No. 96-261, December 19, 1996

By Bruce Egan,¹ Rob Frieden² and Steve Parsons³

I. Introduction and Summary

In response to the Notice of Proposed Rule Making In the Matter of International Settlement Rates issued December 19, 1996, Telmex asked us to analyze the economic aspects of the benchmark methodology and to prepare a statement of our findings.

Unfettered market processes fuel the engine for competition and this promotes market incentives for the introduction of new services, stimulates investment in new network technology, reduces prices for consumers and provides the necessary pressure for the negotiation of lower settlement rates for international long distance service (IMTS). Thus, it is important that the FCC's IMTS competition policies encourage symmetrical competition, both inside and outside the United States, especially facilities-based competition. Over the long term, competitive market pressures, combined with settlement rates which are the product of free bilateral negotiations, will continue to result in more open telecommunications markets, creating benefits for customers in all countries. This is especially true for countries like Mexico which have already embraced telecom market liberalization. Mexico is well on its

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way toward liberalizing both its domestic (MTS) and international long distance (IMTS) sectors and settlement rates have been trending down rapidly in recent years. Any transition path for settlement rate reform which the FCC may adopt in this proceeding should recognize the progress that Mexico has achieved and will continue to achieve. The FCC should encourage other countries to emulate the rapid progress with which Mexico has recently liberalized the sector and reduced settlement rates. Attempts by the FCC to strongly manage the process of settlement rate reduction risks the unintentional stifling of progress in the competitive process and the natural reduction in negotiated rates brought about by market forces of competition. The FCC's proposal to unilaterally impose lower settlement rates on countries like Mexico. without addressing the need for further structural reform of the telecommunications sector risks punishing countries like Mexico for their recent progress, and could even result in slowing down future progress.

We find that benchmark settlement rate setting methodologies proposed by the FCC are inappropriate, and, at least in the case of Mexico, unnecessary to accomplish the FCC's ultimate objective of lower IMTS prices for American consumers. At ¶ 35 of the NPRM, the FCC states that its proposed methodologies for setting benchmark settlement rates rely on the framework described in ITU-T Recommendation D.140 issued in September 1995 which calls for cost oriented, nondiscriminatory settlement rates. However, the process spelled out in ITU D.140 also stresses the continued reliance on bilateral carrier negotiations, both to determine cost based settlement rate levels and a transition time period over which current rates may move toward cost based rates. The ITU D.140 guidelines also note that the costs used to determine settlement rates can legitimately include direct costs, indirect or common costs, and other costs as appropriate. Perhaps most important of all, contrary to the FCC's incremental cost approach specified in the NPRM, the ITU D.140 recommendations do not even mention incremental costs as the appropriate costing methodology. In short, it is not obvious that the FCC's statement at ¶35 of the NPRM, that its costing and settlement rate setting methods are based on ITU D.140 Recommendations, is an accurate characterization of the ITU's recommended costing approach.

The FCC's International Bureau conducted a study which calculated "tariff component prices" (TCPs) based on the sum of foreign carriers' tariff rates for international transmission and national extension network components, and added a price for the international gateway element based on data published by the ITU. But the fact remains that no actual cost study was performed at all, and certainly not one in which any correspondent IMTS carriers in foreign countries played any meaningful role, as called for in the ITU D.140 Recommendations. The FCC methodology is invalid because it incorrectly assumes that there is

a constant relationship between costs and rates across countries. Such a method punishes a country like Mexico which has lower domestic rates reflecting a telecommunications market which is being rapidly liberalized. In addition, the time period chosen by the International Bureau is abnormal for Mexico, with high rates of devaluation of the Peso, leading to an abnormally low tariffed component price.

We note that only carriers themselves can reasonably estimate costs in their own countries and, again, this is what was anticipated in the ITU D.140 costing and negotiating process. In freely functioning markets, prices move toward costs but not necessarily toward incremental costs. Firms in any industry must on average expect to recover their full cost; if this does not occur investments will simply not be forthcoming.

Although, in theory, in competitive markets, reduced factor input prices (i.e., settlement rates) should generally result in lower retail prices (IMTS end user tariffs), we find evidence that lower settlement rates are not being passed on to U.S. consumers. Indeed, this is the principal argument which the FCC relies on when it states in the NPRM that the "problems" in the U.S. IMTS market of traffic imbalances and artificially high end user prices can be "solved" by imposing lower settlement rates on foreign correspondent carriers. The available data for U.S.-Mexico traffic flows and settlement rate trends, discussed in Section V. following, indicates that the FCC's presumption that lower settlement rates can "solve" the U.S. IMTS "problems" is not the case at all. In fact, the available data lead to the opposite conclusion -- dramatic reductions in settlement rates neither lead to substantially lower end user prices for U.S. consumers, nor lead to a balancing of traffic between Mexico and the U.S.

Rather, it appears that the underlying imbalance of IMTS calling between the U.S. and Mexico naturally results from socio-economic characteristics such as income and immigration asymmetries. The data presented in Section V. demonstrate that the Mexico/U.S. traffic imbalance has actually worsened (i.e., the ratio of U.S.-Mexico calling to Mexico-U.S. calling has been rising) despite significant reductions in Mexico's settlement rates. The empirical analysis, based on over ten years of data, indicate that further reductions in the settlement rate are unlikely to substantially reduce the traffic imbalance between the two countries. In addition, Mexico is generally ahead of other countries in settlement reform. Mexico has had rapid and significant reductions in its settlement rates compared to most other countries in its income classification (both the FCC and the ITU classify Mexico among other "upper middle income" countries). The available data also show that, among other countries designated as "upper middle income" countries. Mexico has a relatively low income and teledensity compared to the

average of upper middle income countries, and yet Mexico's telecom sector exhibits relatively higher efficiency characteristics.

II. Encouraging Facilities-Based Competition and Freely Functioning Bilateral Negotiations Should Form the Foundation for Settlement Rate Policy

The international telecommunications business environment is changing in ways conducive to moving toward cost-based accounting rates. Some governments have relinquished ownership and control of national carriers. Increasingly, nations have authorized facilities-based competition and have liberalized policies and partially deregulated incumbent carriers so that free and robust competition can ensue. The onset of competition among facilities-based carriers, resellers and arbitrageurs has resulted in marketplace structural changes that will translate into new and real business incentives to lower accounting and settlement rates. These rates will trend downward toward cost as United States international carriers and their foreign correspondents jointly recognize the benefits of lower rates.

Encouraging genuinely free and open competition both within the U.S. and outside the U.S. is critical. The allowance of full, symmetric and unfettered competitive processes will promote new service offering, new investment, and lower prices for consumers. This basic process will create the environment in which natural pressures will occur for the negotiation of lower settlement rates through voluntary bilateral negotiation.

The economic benefits of reduced regulation and full, unfettered opening of markets to competition is well known. In particular, the benefits from a truly competitive process are substantial when there are no attempts at handicapping or creating asymmetrical competitive standards.

An important theme in the settlement rates NPRM is that telecommunications competition within a country creates the structure by which appropriate settlement rates can exist. Mexico now has a history of rapid changes in opening up its economy, particularly its telecommunications sector. In 1986 Mexico joined GATT, breaking a long protectionist tradition. By 1989 many trade tariffs had been substantially reduced and requirements for, and restrictions on, foreign investment were substantially reduced. In December of 1990 Telmex was privatized and it embarked on a path of massive changes and massive investments in telecommunications infrastructure. In

⁴ Based on data from: World Telecommunications Development Report: Information Infrastructures and World Telecommunications Indicators (Geneva: ITU, 1995).

⁵ International Settlement Rates NPRM at ¶ 3, 16-17.

November 1993 the Mexican Senate approved the North American Free Trade Agreement ("NAFTA"), further liberalizing trade between Canada, the U.S. and Mexico. In 1995 the New Telecommunications Law was passed in Mexico and the first concessions to other long distance competitors have been granted. In 1997, concessions will be granted to other companies to provide local telecommunications. At this time, in addition to Telmex, there are nine long distance concessions and an estimated eighteen applications for local concessions.⁶

The FCC has supported the use of call-back services offered by U. S. companies, effectively converting inbound international calls to outbound calls which exacerbates the overall U.S. revenue settlement deficit. The Commission also supports the use of settlement-exempt private lines that access the public switched telecommunication network.⁷ While these two competitive mechanisms of circumventing all or a portion of IMTS settlement charges of foreign carriers do not have much effect in Mexico -- which has relatively low Mexico - U.S. call origination charges -- they will continue to grow in importance, especially in light of the FCC's new flexible accounting rate policies and its effective competitive opportunities (ECO) test adopted in its Foreign Carrier Entry Order. Such new routing opportunities create business incentives for carriers to negotiate a further reduction in settlement rates. Softwaredefined networks and private lines are increasingly utilized as alternative routing vehicles between the United States and its IMTS foreign correspondent carriers and countries providing "effective competitive opportunities." All of these activities, but especially the authorization of facilities-based competition, create natural pressures for reductions in international settlement rates. If settlement rates are artificially high in countries that have liberalized the telecom sector, like Mexico, competitive market processes will create sufficient incentives and methods to circumvent settlement rates that are perceived to be excessive, reducing correspondent settlement revenues. This is as it should be.

It is beneficial to foster the allowance of facilities-based competition, as exists in Mexico; this creates incentives for carriers to reduce settlement rates. As more carriers recognize the flaws in the

Reforma, (Mexico City, 13 January, 1997).

⁷ "To further reduce accounting rates, we have also actively promoted methods of providing or accessing services which vary from the traditional correspondent relationship. For example, we have allowed resale of international private lines to provide switched service, call-back, switched hubbing, and country direct services." Accounting Rate Policy Statement at ¶ 12.

⁸ FCC News Report No. DC 96-106, "Commission Allows New Flexibility in International Accounting Rates", CC Docket No. 90-337, Phase II, November 26, 1996. For a description of the ECO test see the FCC Market Entry and Regulation of Foreign-Affiliated Entities, Report and Order, FCC 95-475, 11 FCC Rcd 3873 (1995) (Foreign Carrier Entry Order).

current accounting rate regime, and perceive the lost commercial opportunities high rates inflict by retarding demand, accounting rates will trend downward as a matter of course.

The allowance of facilities-based competition will provide commercial incentives for carriers to negotiate lower settlement rates. With as many as nine new facilities-based competitors and the price and service competition that should create for end users, Mexico should begin to generate significantly more inbound United States traffic, thereby reducing the U.S. settlement deficit.

The scope of facilities-based competition in Mexico should create commercial incentives for carriers to seek accounting rate reductions. What has occurred in Mexico provides a case study on how swift progress in settlement rate reform can be achieved. Just a few years ago Mexico had a government-owned monopoly disinclined to accommodate any carrier correspondent keen on negotiating lower settlement rates. Now, on a normalized basis, taking into account population, wealth and other factors, Mexico is coming closer to achieving traffic parity with the United States than many other nations. The lesson is clear: encouraging nations to authorize facilities-based competition, creates commercial incentives for carriers to negotiate lower settlement rates.

III. A Benchmark Based on Domestic Rates is Inappropriate

The FCC's benchmark methodology is based in part on a correspondent carrier's domestic rates. The implied premise of this approach is that there is a close correspondence between costs and prices and that this correspondence is constant or equivalent on a global basis. However, there is no reason to expect that the price/cost relationships are identical, or even similar across countries. This implied premise is clearly incorrect for Mexico.

An example of the inapplicability of the benchmark methodology to Mexico is illustrated by the International Transmission Tariffed Component Prices (TCPs) from the study performed by the International Bureau. The tariffed component price of \$.009 for the IMTS transmission component for Mexico is the lowest of all 65 countries

⁹ With regard to the international facility component the Settlement Rates NPRM states: "The cost element for this component, therefore, is based on foreign carriers' private line rates for dedicated circuits." Settlement Rates NPRM at ¶ 37. With regard to the national extension component the Settlement Rates NPRM states: "Foreign carriers' domestic rates and the distribution of U.S. billed service within a country are used to compute an average charge per minute for cost of this component." Settlement Rates NPRM at ¶ 31 (footnote excluded).

¹⁰ Settlement Rates NPRM, e.g., at Appendix E.

listed in Appendix B of the FCC's NPRM. The nearest value to \$.009 is for the United Kingdom at \$.024 (267% higher) followed by \$0.26 for the Netherlands. Admittedly, Mexico may have low transmission costs due to its proximity to the U.S. However, it is difficult to accept that no other country in the world can come close to matching the transmission efficiencies allegedly available in Mexico. The FCC asserts in its NPRM that, as a cost driver, distance is not a significant factor. In contrast, Brazil, which has income and development characteristics similar to Mexico, has a tariffed component price for international transmission of \$.066, a rate 733% higher than the value determined for Mexico.

A cursory examination of FCC calculated TCPs for "upper middle income" economies (see Appendix D income classifications) show numerous inconsistencies. Based on the TCP calculations in Appendix B for upper middle income countries, even Chile, arguably the most competitive long distance market in the world, has a higher TCP than Mexico, while, another upper middle income country with a monopoly telecom authority, Barbados, reports a lower combined TCP than any other country, with the national extension component reported to be zero. Clearly, the FCC's proposal to use this data set to calculate an average target benchmark settlement rate for all upper middle income countries is going to reflect the flaws and inconsistencies in the underlying TCP data. These TCP data are simply not a good proxy for actual costs and the FCC admits that it has no actual cost studies to base benchmark target settlement rates on. Even if the FCC desires to set cost based benchmark settlement rates, it is readily apparent from the FCC's own TCP calculations for correspondent countries that this data is unreliable and inconsistent and should not be used in lieu of actual cost studies or for setting benchmark settlement rates.

In addition, the study period chosen for the data analysis by the International Bureau represents an anomaly for Mexico. "The Bureau used data collected during the fourth quarter of 1995 through mid 1996 to calculate tariffed components prices for these sixty-five countries." During this period, Mexico faced much more rapid rates of inflation than it had in the past and correspondingly rapid devaluation in the peso. In 1995 in particular, this rapid inflation in other prices in the economy, devaluation of the peso and relatively stable nominal peso prices for telecommunications services drove the dollar value of telecommunications services in Mexico to record low levels. Of course, the devaluation of the Peso affects all three Tariff Component Price elements.

¹¹ Settlement Rates NPRM at ¶ 37.

Telmex has estimated that for the full year 1995, its average dollar revenue per minute of international long distance fell to \$.60. It appears that the fourth quarter of 1995 would effectively have had even lower rates.

Perhaps more importantly, a country such as Mexico, which has opened its telecommunications market to competition and has reduced real telecommunications prices, may be unduly penalized by a benchmark method based on assumed prices in Mexico. The FCC's proposed benchmark rate system is ostensibly targeted at countries that have failed to foster facilities-based competition and reductions in domestic telecommunications prices. Under a scenario representative of changed circumstances, including carrier privatization, liberalization, deregulation, and competition, both accounting and collection rates in Mexico have declined substantially in recent years. Mexico, and other progressive nations, should not be penalized, even unintentionally, for their rapid progress in the telecommunications sector.

IV. Only Carriers Can Estimate The Costs Which Must Be Recovered in Rates

Accounting rates represent a composite of several switching and routing functions including both domestic and international segments. A single figure represents a domestic tail circuit from call originator to an international gateway, the switching and routing needed to take a call to an international transmission line, both international half-circuits and the switching and routing needed to deliver the call to the intended recipient at the "foreign" end. Because there are several elements and because cost characteristics differ between countries and between equipment vintages and routes, identifying a single cost figure or benchmark presents a challenge, particularly if the cost estimator is not a participating carrier. Carriers in other countries are likely to face a different mix of technologies, engineering criteria, labor contracts, and government requirements.

A single accounting rate for a country pair, or a target benchmark rate for a group of countries in an income category, by definition involves cost-averaging. There are numerous domestic and international routing alternatives, that may have significantly different cost characteristics. Carriers, and only carriers, have the resources available to determine a credible estimate of costs they incur to engineer a through route. Likewise, carriers are in the best position to quantify additional costs incurred when they have to satisfy government-mandated service objectives like universal service and infrastructure development. These public service obligations impose real and substantial additional costs on carriers above basic network facilities costs and contribute toward higher total costs, and, in turn, higher settlement rates. This situation is no different than when domestic U.S. long distance carriers pay access charges to local telephone companies which are well above the actual costs incurred to originate and terminate domestic MTS and IMTS traffic. The additional costs often are the result of government imposed public service obligations.

Thus, proxies or estimates for incremental costs should not be used to establish settlement rates for correspondent countries. In particular, incremental cost proxies, which are developed for or by U. S. carriers or the FCC should not be used to establish rates for other countries. This is particularly true in light of the complexity and variability in international telecommunication routing, the use of equipment spanning several generations and operating efficiency levels, and the possibility that some carriers may have "full employment" or other costly public service obligations that saddle them with certain unavoidable costs. We are not advocating that U.S. IMTS carriers, or their customers, should be subsidizing the infrastructure costs and public service obligations of foreign correspondents, only that, similar to the situation in the U.S., local telephone companies generally must price the entire range of services offered in order to recover the total costs of business, inclusive of government imposed public service obligations.

Furthermore, a multiservice network-based telecommunications provider has shared, joint and common costs that must be recovered by pricing services above any measure of incremental cost. These costs include a host of investments and activities which would not be included in measures of incremental cost.¹³

Such common or indirect (i.e., non-incremental) costs are not an indication of inefficiency. On the contrary, the ability to perform a function once (such as legal or human resources) rather than multiple times for each service is evidence of cost efficiency through sharing of resources. The greater the common costs, the greater the potential economies of scope, and the greater the justification for prices for services to exceed incremental costs.¹⁴

It is important to recognize that competitive market processes tend to drive prices toward costs, but not necessarily toward incremental costs. Firms, even ones operating in the most competitive environment, must recover their historical investments and their total costs. Without an expectation of recovery of their full investment and recovery of their full ongoing costs (not simply recovery of later calculations of incremental cost), firms will avoid investments in an industry, or in a country. Firms must expect to earn a profit in order to engage in commercial activity,

¹³ For U.S. local exchange carriers, estimates of the proportion of total costs which are not incremental fall in the range of 40% to 50%. Although the level of U.S. LEC costs, like measures of U.S. telecommunications costs in general, may not be indicative of costs in Mexico, the magnitude of LEC common costs is at least instructive regarding the nature and the magnitude of such costs. Indeed, extended unresolved disputes regarding fully distributed costs can be explained by a lack of a clear cost causative relationship and the significance of common costs, i.e., costs which are not incremental.

¹⁴ Common costs may be assumed to be a source of economies of scope as long as production processes involving shared and common costs are relatively efficient.

including ones that provide desirable positive networking externalities like telecommunication infrastructure development in rural locales.

It is also important to note that in real world markets, prices are not based on a theoretical standard of efficiency. At any point in time, no firm may have achieved a level of efficiency that, in hindsight, might have been achieved with full information about future technology cost and demand. Market prices are not determined by the incremental cost of the most efficient firm in theory or even in reality, but rather by the costs actually incurred by the least efficient provider still operating in the marketplace. The competitive process, rather than cost estimates determine actual prices.

V. Lower Settlement Rates Are Not Necessarily Passed on to U.S. Consumers

Theoretically, in a competitive market, the lowering of factor input prices is likely to lead to a reduction in retail prices. However, evidence indicates that a reduction in settlement rates to terminate traffic in Mexico will not be fully passed on to U.S. consumers.

For example, based on empirical data presented in an academic study for Hong Kong:

For US carriers in the last 4 years, retained revenue per minute (after payment of settlement) has actually increased. This indicates that . . . US IDD prices are actually increasing in many instances when accounting rates are being reduced or, at a minimum, falling less than accounting rates. In neither instance, however, can it be argued that accounting rates are actually serving as a floor to US IDD rates.¹⁵

Sections of the FCC's Order establishing AT&T's non-dominant status are relevant here. ¹⁶ WorldCom suggested that AT&T's rates had not declined as rapidly as settlement rates and the FCC stated: "We agree that U.S. international calling prices are at the very high-end of the 'zone' of reasonableness. Indeed, residential IMTS pricing is significantly higher and more profitable than U.S. domestic long distance calling prices, and some IMTS prices have risen over the past several vears." ¹⁷

¹⁷ <u>Id</u>. at ¶ 81, 82.

¹⁵ Keith Bernard, Hong Kong Update in <u>Proceedings of the 19th Annual</u> Conference of the Pacific Telecommunications Council (Honolulu, 1997).

Motion of AT&T to be Declared Non-Dominant for International Service, FCC 96-209, (Released May 14, 1996)[hereinafter cited as Non-Dominant Order].

Table 1 (appearing at the end of this statement), and the accompanying charts, indicate that as average per minute settlement charges paid by U.S. IMTS providers was constantly falling over the time period from 1990 to 1997, AT&T's IMTS average retail prices for United States-Mexico calls has actually been rising. This is contrary to the FCC's assertion that the U.S. IMTS market "problem" of artificially high end user charges might somehow be "solved" by lower settlement rates. It is noteworthy that, over this same time period, there has been a substantial increase in the number of IMTS market players in the U.S. and a declining AT&T market share, presumably causing competitive pressure on AT&T's retail IMTS rates. In 1997, the average U.S.-Mexico settlement rate is now at parity and equal to approximately to \$.395.18

The fact that U.S. IMTS providers do not pass on the savings from lower settlement rates to American consumers is not surprising considering recent history with U.S. domestic long distance prices. Since January 1994, AT&T has pushed up basic long distance prices to end users 22%, with the last major increase in basic tariff rates being about 6% in November 1996. Over the same time period, carrier access charges per minute dropped by about 10%. (Note: Carrier access charges are assessed by local telephone companies on long distance carriers to originate or terminate domestic MTS calls — therefore, carrier access charges are the U.S. domestic counterpart of foreign correspondent settlement charges for IMTS.) There are other academic studies of the domestic U.S. long distance market which demonstrate that reductions in carrier access charges for call origination and termination do not result in corresponding reductions in retail prices to consumers. 21

VI. Traffic Imbalances are a Natural Result of Socio-economic Characteristics and not Settlement Rates

Our empirical examination of settlement charges paid by U.S. carriers to their Mexican correspondents compared to U.S. IMTS retail prices for U.S.-to-Mexico calling reveals that IMTS traffic imbalances are not due to artificially high settlement rates. Table 2 provides the number of IMTS minutes flowing in both directions between Mexico and the U.S. for the period 1985 to 1996, the ratio of incoming (U.S. to Mexico) to outgoing (Mexico to U.S.) minutes, and the average settlement rate per minute for traffic in both directions. The data shows that, in

¹⁸ When rates are symmetrical or in parity, the settlement rate is one-half of the accounting rate.

^{19 &}quot;AT&T and Rivals Boost Rates Further", The Wall Street Journal, November 29, 1996. A3.

²⁰ Table 35, "Interstate Charges by Local Telephone Companies to Long Distance Carriers", <u>Trends in Telephone Service</u>, FCC Industry Analysis Division, Common Carrier Bureau, May, 1996.

²¹ Taylor, William E. and Lester D. Taylor, ""Post-divestiture Long-Distance Competition in the United States," American Economic Review Papers and Proceedings, Vol. 83, No. 2 (May 1993), pp. 185-190; and P. MacAvoy, The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Services, Cambridge, MA: The MIT Press, 1996, page 115.

recent history, while the settlement rate paid by U.S. IMTS carriers fell dramatically over the period, from \$.953 to \$.504, a drop of 53%, the traffic imbalance measured by the ratio of incoming to outgoing minutes, increased substantially from 1.926 to 2.576, an increase of 34%. This contradicts the FCC's assertion that the U.S. IMTS market "problem" of traffic imbalances may somehow be "solved" by lower settlement rates.²²

The disproportionate amount of U.S.-to-Mexico (as compared to Mexico-to-U.S.) traffic is caused in part by national wealth, a large population, and significant immigrant and expatriate residents. Additionally, Mexico's geographic proximity, its unique social and business ties with the United States and substantial direct investment in Mexico by U.S. companies helps explain why more telephone traffic originates from the United States. The U.S. and Mexico share a strong community of interest. For the two years 1994 and 1995, the total value of goods traded between the two countries was nearly \$230 billion²³ and the flow of direct investment to Mexico from the U.S. totaled nearly \$9 billion.²⁴ In the telecommunications sector, substantial investments and plans for investments have been made by SBC Corporation (Telmex), Bell Atlantic (Iusacell), MCI (Avantel), AT&T, GTE and others.

In almost any dimension, the economic relationship and community of interest between the U.S. and Mexico is significant. This is indicated by the great amount of foreign direct investment, the high volume of trade, and the number and level of interest expressed by U.S. carriers desiring to enter the Mexican market. As such, telecommunications traffic represents a small, but still significant, portion of total trade and business activity between Mexico and the United States. Differentials exist in many other areas such as pharmaceuticals and medical technologies, computer equipment, banking and credit services and telecommunications equipment in which Mexico likely faces a deficit with net payments to the U.S. During the period 1991 through 1994 Mexico faced a total trade deficit with the United States of over \$21 billion. 25 Deficits, of one form or another, will virtually always result because all characteristics of the two trading partners are not perfectly equal.

In summary, although it is clear that the FCC expects imposing a lower settlement rate on Mexico will directly serve to reduce the traffic imbalance in international calls to and from the United States and result in lower IMTS prices to American consumers, an examination of the available data shows that such a reduction in Mexico's settlement rates will not achieve either goal.

It is important to note that settlement or settlement-like charges in markets in general are neither symmetric or identical, nor incremental cost

²² The settlement rate paid by Mexican IMTS providers to U.S. carriers was relatively steady during this period, so it should not have been a factor one way or the other.

²³ International Monetary Fund, Direction of Trade Statistics, 10 (December 1996).

²⁴ Republic of Mexico, Ministry of Commerce, Foreign Investment.

²⁵ International Monetary Fund, Direction of Trade Statistics, 10 (December 1996).

based, even within the U.S. domestic market. A cursory review of local telephone company charges assessed on long distance carriers for originating or terminating MTS traffic in the United States are neither identical or symmetric across different regions of the country or across different Local Exchange Carriers ("LECs"). Regional Bell Operating Companies ("RBOCs") often note that their rates are substantially lower than the rates of hundreds of smaller independent LECs. In fact, the rates for origination and termination of domestic MTS calls vary across RBOCs themselves and even across states served by the same RBOC. It is relatively rare to have a terminating access charge for a call from point A to point B, that is identical to the charge when a call travels from point B to point A.²⁶

Much of the reason for the absence of equivalent revenue settlement rates in domestic telecommunications is that cost characteristics for carriers generally are not identical. Clearly conditions in Mexico generate higher telecommunications costs than what carriers operating in the United States incur. There is a strong economic rationale for higher settlement rates to terminate calls in Mexico than to terminate calls in the U.S. This would likely be the result of carrier specific cost studies or unfettered negotiations. This natural result should be considered by the FCC when evaluating policies to impose reduced settlement rates on Mexico, especially in the absence of carrier cost studies.

VII. Mexico Generally Is Ahead of Other Upper Middle Income Countries in Liberalization, Efficiency and Settlement Reform

In considering carrier costs and appropriate settlement rates throughout the world, it is imperative to have a clear understanding of such key factors as a nation's activities in opening its telecommunications sector to competition, socio-economic status, the financial performance of its telecommunications sector and whether accounting and collection charges have trended downward.

According to ITU data (1994) Mexico's teledensity is 9.25 lines per one hundred inhabitants.²⁷ This figure represents significant progress from 4.78 lines per one hundred inhabitants in 1984, strong evidence that privatization, increased infrastructure investments and facilities-based competition has enhanced consumer welfare. Still with a comparatively low teledensity, especially in non-urban areas, Telmex must continue to undertake a substantial infrastructure investment program to expand teledensity for the

²⁶ The FCC Common Carrier Bureau and the National Exchange Carrier Association (NECA) annually report originating and terminating carrier access charges. See for example, Table 36, "Average Rate per Minute by Carrier", Trends in Telephone Service, FCC Industry Analysis Division, Common Carrier Bureau, May, 1996.

²⁷ An aggressive investment program for network expansion has since increased teledensity.

foreseeable future. In 1994, the teledensity in Mexico City was 11.62 per one hundred population (in 1994 Mexico City represented about 25% of the total population with 36.1% of main telephone lines), while in the rest of the country teledensity was only 6.74%.

The ITU publishes annually key world telecommunications indicators for 205 countries by income category. Based on ITU data (1994), Mexico constituted one of 39 countries placed in the "upper middle income" category. 28 In Appendix D of the Settlement Rate NPRM, the FCC lists 35 countries in the upper middle income category, some of which are included in the list of 65 countries in Appendix B which provides TCPs for "those having the largest traffic volumes with the United States."29 Some of the countries appearing in the FCC's list are not included in the ITU's list and vice-versa. However, the ITU demographic statistics by income category are useful and revealing. ITU per capita income data (1993) for Mexico is \$3,969, below the average of the upper middle income countries at \$4.515 (only six countries have lower per capita incomes of the 39 countries in this category), and even falls below the per capita average for the world in total (\$4,390).30 Of the 39 upper middle income countries 24 have the advantage of having a greater population density, and 33 have the advantage of having higher telephone density than Mexico's 9.25 lines per 100 inhabitants.31 However, despite these disadvantages. Mexico ranks very high on measures of efficiency as compared to the other upper middle income countries. With respect to waiting time and waiting lists for telephone service, Mexico's 97.7% demand satisfied is significantly above the 92.2% for the grouping as a whole. 32

Only two of the 39 countries in the category have a shorter waiting time for phone service than the 0.2 years for Mexico; this is substantially below the 1.2 years average for the category. 82.7% of the telephone lines in Mexico are digitally served compared to an average 58.9% for the 39 countries in the upper middle income group, Mexico even exceeds the 68.7% average for high income countries. Mexico has 174 main lines per employee, as compared to 139 for the average of upper middle income countries, and 201 for high income countries. Similarly, its telecommunications revenue per employee is more than double that for the average of upper middle income countries and nearly as high as the average for high income countries. These efficiencies are

World Telecommunications Development Report: Information Infrastructures and World Telecommunications Indicators (Geneva: ITU, 1995).

²⁹ NPRM ¶37.

International Telecommunication Union, <u>World Telecommunications</u>

<u>Development Report: Information Infrastructures and World Telecommunications</u>

<u>Indicators at A6 (Geneva: ITU, 1995).</u>

³¹ ld.

³² ld. at A14.

³³ Id. at A13.

³⁴ ld. at A18.

³⁵ Id. at A54.

achieved in part through investment per main line which is somewhat higher than that for upper middle income and high income countries in general. In the NPRM, the FCC asserts that high settlement rates are likely to be an indicator of domestic inefficiency of foreign correspondent carriers. To the extent that Mexico's settlement rates are perceived as being artificially high, this is not corroborated with TELMEX's relatively high indicators of operating efficiency among upper middle income countries.

Of the 65 countries for which the FCC lists "Tariffed Component Prices" (TCPs) in Appendix B of the NPRM, Mexico and 12 other upper middle income countries are contained in the list.³⁶ For Mexico the TCP value listed is \$.168 per minute while the average value for the 12 other countries in the category is \$.1965.³⁷ In contrast, note that the value for Argentina is \$.321. Argentina has a per capita income (1994) almost double that of Mexico and teledensity over 14%. Yet it evidences less efficiency with waiting times more than four times that of Mexico and fewer lines per employee (155 vs. 174).

VIII. U.S. Customers Benefit From the Telecommunications Environment in Mexico

Privatization, deregulation, and facilities-based competition are reshaping the Mexican telecommunications marketplace with downward pressure on international accounting and settlement rates a natural and predictable consequence. With U.S. companies like SBC, AT&T, Sprint, MCI and Bell Atlantic pursuing new Mexican open market opportunities, Mexico should be able to attract capital for achieving the infrastructure investment it needs for network expansion.

In telecommunications, positive network externalities can be quite important in countries with low teledensities. When networks are relatively small, each existing subscriber is likely to value the ability to communicate with new subscribers on the network. ³⁸ In the United States, because of relatively high telephone penetration, incremental additions to network subscribers provide a relatively low incremental network externality. In addition, in the U.S., anything less than virtually 100% penetration is usually the result of a lack of facilities, but rather by a conscious choice by customers not to subscribe to readily

³⁶ Settlement Rates NPRM at Table 1.

³⁷ This average includes Barbados, which reports a zero tariff rate for the national extension component. This component typically accounts for the lion's share of the total TCP per minute.

Michael L. Katz and Carl Shapiro, "Technology Adoption in the Presence of Network Externalities," 94 Journal of Political Economy 822 (1986); Michael L. Katz and Carl Shapiro, "Network Externalities, Competition, and Compatibility," 75 American Economics Review 424 (1985); Michael L. Katz and Carl Shapiro, "Network Externalities, Competition, and Compatibility," 75 American Economics Review 424 (1985); Carmen Matutes and Pierre Regibeau, "Mix and Match': Product Compatibility Without Network Externalities," 19 Rand Journal of Economics, 221 (1988).

available facilities. In essence, the U.S. has available a telecommunications infrastructure serving virtually 100% of the population.

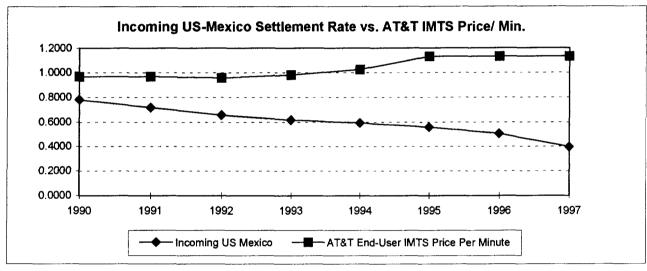
Mexico presents a vastly different scenario. Because of the much lower levels of telephone penetration due to the historical lack of network expansion, incremental positive network externalities are much greater. Unlike the United States, Mexico does not currently have network facilities to serve virtually 100% of its population.

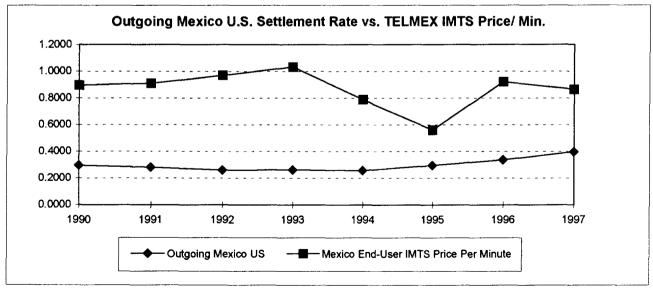
It is important to recognize that the value of positive network externalities does not stop at the border. Customers calling from the United States to Mexico are likely to value the access to additional subscribers to the network in Mexico. Increased infrastructure investment and teledensity combined with a liberalized market featuring facilities-based competition will stimulate outbound IMTS calling and will create an environment which is more conducive to negotiating lower accounting and settlement rates with U.S. correspondents.

Table 1: Comparison of IMTS Settlement Rates vs. Retail Prices

(Minutes and US Dollars)

	IMTS Settlement Rate Per Minute		End-User IMTS Average Price Per Minute		
Year	Incoming US Mexico	Outgoing Mexico US	AT&T	TELMEX	
1990	0.7790	0.2950	0.9661	0.8932	
1991	0.7150	0.2800	0.9661	0.9078	
1992	0.6530	0.2570	0.9557	0.9688	
1993	0.6150	0.2600	0.9780	1.0317	
1994	0.5910	0.2560	1.0243	0.7871	
1995	0.5570	0.2940	1.1316	0.5581	
1996	0.5040	0.3360	1.1316	0.9211	
1997	0.3950	0.3950	1.1316	0.8625	





Sources: 1. Long Distance For Less (1994-1996), Book of TELMEX Tariff Rates (1990-1997).

2. AT&T end-user tariff rates 1993-1995 were estimated based on incoming AT&T billed revenue and incoming minutes obtained from TELMEX Settlements Report.

Table 2: US - Mexico IMTS Minutes and Settlement Rates

(Minutes and US Dollars)

Year	Number of Minutes		Ratio	Settlement Rate Per Minute	
	Outgoing Mexico-US	Incoming US-Mexico	Incoming / Outgoing	US	Mexico
1985	142,003,425	273,545,817	1.926	0.327	0.953
1986	154,102,481	321,962,670	2.089	0.312	0.950
1987	154,533,977	371,059,351	2.401	0.312	0.935
1988	195,999,142	467,285,916	2.384	0.291	0.980
1989	242,334,737	618,712,492	2.553	0.317	0.960
1990	372,956,921	882,552,266	2.366	0.295	0.779
1991	455,264,766	1,036,271,098	2.276	0.280	0.715
1992	612,187,369	1,275,564,513	2.084	0.257	0.651
1993	652,073,900	1,457,785,771	2.236	0.260	0.615
1994	745,180,597	1,712,389,438	2.298	0.256	0.591
1995	831,795,137	2,010,108,578	2.417	0.294	0.557
1996	869,365,357	2,239,652,952	2.576	0.336	0.504

Source : TELMEX

CERTIFICATE OF SERVICE

I hereby certify that I have this 7th day of February, 1997, caused copies of the foregoing "Comments of Teléfonos de México, S.A. de C.V." to be served by hand delivery on the following:

Chairman Reed E. Hundt Federal Communications Commission 1919 M Street, N.W. Room 814 Washington, D.C. 20554

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